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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRUONG, LECHI

ART UNIT PAPER NUMBER

2194

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,295

Applicant(s)

MITCHELL ET AL.

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/21/2005.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. Claims 1-22 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1).

3. As to claim 1, Rosenberg teaches the invention substantially as claimed including: a message (the packet, col 3, ln 7-9/ ln 23-25), a selected application (terminal within a said cell, col 2, ln 65-67 to col 3, ln 1-3/ another satellite, col 3, ln 14-17/ln 27-31/ ln 44-47/ destination sector, col 3, ln 59-62), format (format, col 10, ln 7-10), ascertaining whether the message is in a selected application format (col 3, ln 1-3/ ln 27-31/ ln 58-61), a next location (another system node, col 3, ln 59-62), if the message is not in the selected application format: routing the message to a next location(col 3, ln 13-17/ ln 45-48/ ln 58-62), if the message is in the selected application routing the message to a selected application processor(col 3, ln 1-3/ ln 10-16/ ln 29-32/col 10, ln 7-10), processing the message by the selected application processor(col 4, ln 48-52/col 5, ln 54-58/col 9, ln 59-63/ col 10, ln 27-31), routing the message to the next location(col

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10, ln 35-36/ ln 45-60). Rosenberg does not explicitly teach the term receiving. However, Rosenberg teaches arrives (col 10, ln 46-47). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to apply the teaching of Rosenberg because Rosenberg's arrives would provides an improved simple determination of the direction in which packet should be routed.

4. **As to claim 2**, Rosenberg teaches the message includes receiving a packet (col 4, ln 48-52).

5. **As to claim 3**, Rosenberg teaches the packet from a network (col 2, ln 37-40).

6. **As to claim 4**, Rosenberg teaches the packet from a switched network (col 1, ln 19-22/ col 10, ln 32).

7. **As to claim 5**, Rosenberg teaches the internet (col 1, ln 29-31).

8. **As to claim 6**, Rosenberg teaches the message is encrypted (col 5, ln 54-57), processing the message by the selected application processor includes decrypting the message by the selected application processor (col 5, ln 54-58).

9. **As to claims 19, 20, 21**, they are apparatus claims of claims 1, 2 and 6; therefore, they are rejected for the same reasons as claims 1, 2 and 6 above.

10. Claims **7-12, 14, 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Shanklin et al (US. Patent 6,578,147 b1).

11. **As to claim 7**, Rosenberg teaches a network (networks, col 2, ln 37-38), a fabric configured for communication (col 6, ln 52-56), a plurality of application service devices

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(satellite nodes 11, col 4, ln 48-52), unprocessed application specific message (packet, col 5, ln 52-58), the plurality of application service devices are configured to receive a plurality of unprocessed application specific message (col 4, ln 45-48), a particular application (the terminals at the edges of the satellite, col 5, ln 55-58), the application specific message (the packet contain a header which includes a destination address and a sequence filed. The payload in the packet contains the encoded user data, which can be from any kind of multimedia service and can include, for example, voice, video, or data, col 5, ln 52-58), each unprocessed application specific message is configured to be processed by a particular application (col 5, ln 53-58/ col 10, ln 7-10/ ln 27-31), each unprocessed applications specific message is processed with the particular application for with it is configured (col 4, ln 48-52/col 5, ln 54-58/col 9, ln 59-63/ col 10, ln 27-31), a plurality of processed application-specific messages is produced(col 5, ln 56-57), service devices are configured to sent the each processed application specific message to the fabric(col 10, ln 56-62).

12. Rosenberg does not explicitly teach process message in parallel. However, Shanklin teaches process message in parallel (the sensors operation in parallel and analyze packet to determine, col 2, ln 64-66).

13. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg and Shanklin because Shanklin's process message in parallel would determines if there is an attempt to gain unauthorized access to the network.

14. **As to claim 8**, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

15. As to **claim 9**, Rosenberg teaches a hardware state machine (col 10, ln 9-11).
16. As to **claim 10**, Shanklin teaches the plurality of application service devices is included in a single integrated circuit (col 6, ln 65-67).
17. As to **claim 11**, Shanklin teaches each application service device comprises a simple programmable processor (col 10, ln 7-8).
18. As to **claim 12**, Shanklin teaches a plurality of interoperably configured distinct physical devices (col 9, ln 5-6).
19. As to **claim 14**, Shanklin teaches an unprocessed application stream (col 5, ln 56-61).
20. As to **claim 16**, Shanklin teaches an e-mail transfer (col 5, ln 3-5).
21. As to **claim 17**, Shanklin teaches a virtual private networking communication (col 1, ln 15-17).
22. As to **claim 18**, Shanklin teaches a TPC offload engine communication (col 5, ln 63-64).
23. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of TB (Troubleshooting).
24. As to **claim 13**, Rosenberg does not teach SSL/TLS. However, TB teaches SSL/TLS (SSL/TLS, page 2, ln 12).
25. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg and TB because TB's SSL/TLS would improves performance required for implementing an encryption acceleration hardware.

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26. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Shanklin et al (US. Patent 6,578,147 b1) and further in view of TB (Troubleshooting).

27. **As to claim 15**, Rosenberg and Shanklin do not teach an SSL/TLS connection between a web browser and a web server. However, TB teaches an SSL/TLS connection between a web browser and a web server (page 4, ln 22-25).

28. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg, Shanklin and TB because TB's an SSL/TLS connection between a web browser and a web server would improves performance required for implement encryption acceleration hardware.

29. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) and further in view of Muthukumar et al (US. Patent 6,820,250 b2).

30. **As to claim 22**, Rosenberg teaches the invention substantially as claimed including: a message (the packet, col 3, ln 7-9/ ln 23-25), a selected application (terminal within a said cell, col 2, ln 65-67 to col 3, ln 1-3/ another satellite, col 3, ln 14-17/ln 27-31/ ln 44-47/ destination sector, col 3, ln 59-62), format (format, col 10, ln 7-10), ascertaining whether the message is in a selected application format (col 3, ln 1-3/ ln 27-31/ ln 58-61), a next location (another system node, col 3, ln 59-62), if the message is not in the selected application format: routing the message to a next location(col 3, ln 13-17/ ln 45-48/ ln 58-62), if the message is in the selected

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application routing the message to a selected application processor(col 3, ln 1-3/ ln 10-16/ ln 29-32/col 10, ln 7-10), processing the message by the selected application processor(col 4, ln 48-52/col 5, ln 54-58/col 9, ln 59-63/ col 10, ln 27-31), routing the message to the next location(col 10, ln 35-36/ ln 45-60), the routing of the message to the next location (col 10, ln 58-61).

31. Rosenberg does not teach the first/second iteration, a pipeline. However, Muthukumar teaches iteration, a pipeline (the first iteration, last iteration, the software pipeline, col 2, ln 64-67).

32. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg and Muthukumar because Muthukumar's the first / second iteration, a pipeline would improve the performance of software pipelined loops.

Response to the argument:

29. Applicant amendment filed on 07/11/2005 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) " the formatting referred to in Rosenberg et al is limited to changing address information contained in the packet header . Such formatting has no affect on the application format of the packet", " Rosenberg et al fail to teach or suggest the step of asserting whether the message is in a selected application format".

(3) " would not construe the term " application" as reading on the terminals".

(4) " there is no mention in Rosenberg et al of the satellite nodes encoding or decoding message".

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(5) “ Rosenberg et al fail to suggest the element of wherein the plurality of application service devices are configured to receive a plurality of unprocessed application-specific message from fabric”

(6) “ To the contrary, since messages transmitted over edge of the network , they cannot be application specific”

30. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Rosenberg teaches providing said Gray code element as a destination address in an information packet intended for that service region, and determining within a said node the difference between said Gray code and a corresponding code stored at the node whereby to determine from a number and bit position of the difference between said codes being used to determine the direction of routing of the packet to another system node or to its destination sector(col 3, ln 55-62/ ln 9-17) . The corresponding code stored at the node is an application format since the claims do not clearly mention the meaning of application format . The specification did not mention about the application format. In addition, the application format of the packet was not in the claim limitations. Rosenberg also teaches the cell processor is a finite state machine that has been designed to give the corresponding format to the incoming packets for the source (col 10, ln 7-10).

As to the point (2), The terminal represented for the application since Rosenberg teaches the terminal of the satellite network carry out the coding and decoding of this data (col 5, ln 55-59).

As to the point(3), Rosenberg teaches each packet is provided with header incorporation a destination address which is read or decoded by a satelliter node on arrival of the packet and is used by the node to determine routing of that packet(col 4, ln 48-52).

As to the point (4), Rosenberg teaches the different between the codes is used to determine the direction of routing of the packet to another satellite or to its destination cell(col 3, ln 45-48). Another satellite or the destination cell are the plurality of application service devices which are chosen to receive the packet based on the determining steps.

As to claim(5), Rosenberg teaches the packet contain a header which includes a destination address and a sequence filed. The payload in the packet contains the encoded user data, which can be from any kind of multimedia service and can include, for example, voice, video, or data(col 5, ln 52-58).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

December 15, 2005


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER